ELSEVIER

Clinical Neurophysiology 114 (2003) 2549–2559

www.elsevier.com/locate/clinph

Table of Contents

VOLUME 114 (2003)

Editorials

Shortened refractory periods in human diabetic neuropathy
S. Kuwabara (Japan) 169

Is somatosensory function abnormal in amyotrophic lateral sclerosis/parkinsonism-dementia complex in Kii peninsula?
H. Shibasaki (Japan) 775

'The stone of madness' and the search for the cortical sources of brain diseases with non-invasive EEG techniques
F. Babiloni, C. Babiloni, F. Carducci, F. Cincotti, P. Rossini (Italy) 1775

Interleaving TMS with functional MRI: now that it is technically feasible how should it be used
H.R. Siebner, L. Lee, S. Bestmann (UK, Germany) 1997

Clinical use of QEEG
M.R. Nuwer (USA) 2225

Invited Reviews

A review of electrophysiology in attention-deficit/hyperactivity disorder: I. Qualitative and quantitative electroencephalography
R.J. Barry, A.R. Clarke, S.J. Johnstone (Australia) 171

A review of electrophysiology in attention-deficit/hyperactivity disorder: II. Event-related potentials
R.J. Barry, S.J. Johnstone, A.R. Clarke (Australia) 184

Brain polarization in humans: a reappraisal of an old tool for prolonged non-invasive modulation of brain excitability
A. Priori (Italy) 589

Transcranial magnetic stimulation and epilepsy
C.A. Tassinari, M. Cincotta, G. Zaccara, R. Michelucci (Italy) 777

Evoked potentials and transcranial magnetic stimulation in migraine: published data and viewpoint on their pathophysiologic significance
J. Schoenen, A. Ambrosini, P.S. Sándor, A. Maertens de Noordhout (Belgium, Italy, Switzerland) 955

Diabetic neuropathy: a review emphasizing diagnostic methods
B.A. Perkins, V. Bril (Canada) 1167

Spinal cord pattern generators for locomotion
V. Dietz (Switzerland) 1379

A review of the modulation of the startle reflex by affective states and its application in psychiatry
C. Grillon, J. Baas (USA) 1557

Neurophysiology of swallowing
C. Ertekin, I. Aydogdu (Turkey) 2226

Original Research Articles

Effect of painful heterotopic stimulation on the cutaneous silent period in the upper limbs
P. Rossi, F. Pierelli, L. Parisi, A. Perrotta, M. Bartolo, G. Amabile, M. Serrao (Italy) 1

Is Ross syndrome a dysautonomic disorder only? An electrophysiologic and histologic study
A. Perretti, M. Nolano, G. De Joanna, V. Tugnoli, G. Iannetti, V. Provitera, G. Cruccu, L. Santoro (Italy) 7

Temperature differences during sleep between fullterm and preterm neonates at matched post-conceptional ages
M.S. Scher, D.A. Steppe, D.G. Salerno, M.E. Beggarly, D.L. Banks (USA) 17

Body posture affects electroencephalographic activity and psychomotor vigilance task performance in sleep-deprived subjects
J.A. Caldwell, B. Prazinko, J.L. Caldwell (USA) 23

EEG findings in steroid-responsive encephalopathy associated with autoimmune thyroiditis
B. Schäuble, P.R. Castillo, B.F. Boeve, B.F. Westmoreland (USA) 32

Improvement in the performance of automated spike detection using dipole source features for artefact rejection
D. Flanagan, R. Agarwal, Y.H. Wang, J. Gotman (Canada) 38

doi:10.1016/S1388-2457(03)00395-X

Seizure detection in the neonatal EEG with synchronization likelihood
J. Altenburg, R.J. Vermeulen, R.L.M. Strijers, W.P.F. Fetter, C.J. Stam (The Netherlands) 50
Early ictal speech and motor inhibition in fronto-mesial epileptic seizures: a polygraphic study in one patient
S. Meletti, G. Rubboli, S. Testoni, R. Michelucci, G. Cantalupo, M. Stanzani-Maserati, F. Calbucci, C.A. Tassinari (Italy) 56
Epileptic source localization with high density EEG: how many electrodes are needed?
G. Lantz, R. Grave de Peralta, L. Spinelli, M. Seeck, C.M. Michel (Switzerland) 63
Localizing significance of temporal intermittent rhythmic delta activity (TIRDA) in drug-resistant focal epilepsy
G. Di Gennaro, P.P. Quarato, P. Onorati, G.B. Colazza, F. Mari, L.G. Grammaldo, O. Ciccarelli, N.G. Meldolesi, F. Sebastiano, M. Manfredi, V. Esposito (Italy, UK) 70
Phase synchronization of the ongoing EEG and auditory EP generation
B.H. Jansen, G. Agarwal, A. Hegde, N.N. Boutros (USA) 79
Conduction velocity of nerve and muscle fiber action potentials after a space mission or a bed rest
D.G. Ruegg, T.H. Kakebeeke, J.-P. Gabriel, M. Bennefeld (Switzerland) 86
Verification of the median-to-ulnar and ulnar-to-median nerve motor fiber anastomosis in the forearm: an electrophysiological study
G. Amoiridis, I.G. Vlachonikolis (Greece) 94
Movement-related cortical potentials in myotonic dystrophy
T. Mitsuoka, C. Watanabe, J. Kitamura, K. Ishigame, S. Nakamura (Japan) 99
Basic mechanisms of central rhythms reactivity to preparation and execution of a voluntary movement: a stereoelectroencephalographic study
W. Szurhaj, P. Derambure, E. Labyt, F. Cassim, J.-L. Bourriez, J. Isnard, J.-D. Guieu, F. Mauguière (France) 107
Abnormal gating of somatosensory inputs in essential tremor
D. Restuccia, M. Valeriani, C. Barba, D. Le Pera, A. Bentivoglio, A. Albanese, M. Rubino, P. Tonali (Italy) 120
Modulation of excitability of human motor cortex (M1) by 1 Hz transcranial magnetic stimulation of the contralateral M1
H.M. Schambra, L. Sawaki, L.G. Cohen (USA) 130
Electrophysiological evidence of abnormal activation of the cerebral network of involuntary attention in alcoholism
M.D. Polo, C. Escera, E. Yago, K. Alho, A. Gual, C. Grau (Spain, UK, Finland) 134
Are the neurophysiological techniques useful for the diagnosis of diaphragmatic impairment in multiple sclerosis (MS)?
G. Miscio, G. Guastamacchia, L. Priano, S. Baudo, A. Mauro (Italy) 147
Dimensional complexity and spectral properties of the human sleep EEG
Y. Shen, E. Olbrich, P. Achermann, P.F. Meier (Switzerland) 199
EEG activities during elicited sleep onset REM and NREM periods reflect different mechanisms of dream generation
T. Takeuchi, R.D. Ogilvie, T.I. Murphy, A.V. Ferrelli (Canada) 210
Magnetic source imaging contributes to the presurgical identification of sensorimotor cortex in patients with frontal lobe epilepsy
P. Ossenblok, F.S.S. Leijten, J.C. de Munck, G.J. Huiskamp, F. Barkhof, P. Boon (The Netherlands, Belgium) 221
Equivalent current dipole estimated from SSR potential distribution over the human hand
H. Mitani, Y. Ishiyama, I. Hashimoto (Japan) 233
Proximal nerve conduction by high-voltage electrical stimulation in S_1 radiculopathies and acquired demyelinating neuropathies
E. Alfonsi, I.M. Merlo, A.M. Clerici, E. Candeloro, E. Marchioni, A. Moglia (Italy) 239
Conduction of neural impulses in diabetic neuropathy
R. Mackel, E. Brink (USA) 248
Double peak sensory responses at submaximal stimulation
I. Aprile, E. Stålberg, P. Tonali, L. Padua (Italy, Sweden) 256
Identification and functional characterization of the trigeminal ventral cervical reflex pathway in the swine
S. Kato, N. Papuashvili, Y.C. Okada (Japan, USA) 263
Paired transcranial magnetic stimulation for the early diagnosis of corticobasal degeneration
E. Frasson, L. Bertolasi, V. Bertasi, S. Fusina, L. Bartolomei, S. Vicentini, N. Rizzuto, A. Priori (Italy) 272
Effect of chemically activated fine muscle afferents on spinal recurrent inhibition in humans
A. Rossi, R. Mazzocchio, B. Decchi (Italy) 279
Soleus H-reflex measures in patients with focal and generalized dystonia
M. Sabbahi, B. Etnyre, I. Al-Jawayed, J. Jankovic (USA) 288
Impaired antagonist inhibition may contribute to akinesia and bradykinesia in Huntington's disease
J.P.P. van Vugt, M. Stijl, R.A.C. Roos, J.G. van Dijk (The Netherlands) 295
Comparison of representational maps using functional magnetic resonance imaging and transcranial magnetic stimulation
M. Lotze, R.J. Kaethner, M. Erb, L.G. Cohen, W. Grodd, H. Topka (Germany, USA) 306
Relaxation in distal and proximal arm muscles: a reaction time study
A. Buccolieri, L. Avanzino, C. Trompetto, G. Abbruzzese (Italy) 313
EEG activity in girls with attention-deficit/hyperactivity disorder
A.R. Clarke, R.J. Barry, R. McCarthy, M. Selikowitz, D.C. Clarke, R.J. Croft (Australia) 319

Enhancement of the somatosensory N140 component during attentional training after stroke
S. Giaquinto, L. Fraioli (Italy) 329
Why the P600 is not just a P300: the role of the basal ganglia
S. Frisch, S.A. Kotz, D.Y. von Cramon, A.D. Friederici (Germany) 336
Auditory distraction with different presentation rates: an event-related potential and behavioral study
U. Roeber, S. Berti, E. Schröger (Germany) 341
Therapeutic effects of peripheral repetitive magnetic stimulation on myofascial pain syndrome
N. Smania, E. Corato, A. Fiaschi, P. Pietropoli, S.M. Aglioti, M. Tinazzi (Italy) 350
Galvanic and acoustic vestibular stimulation activate different populations of vestibular afferents
A.M. Bacsi, S.R.D. Watson, J.G. Colebatch (Australia) 359
The cumulative effect of high click rate on monaural and binaural processing in the human auditory brainstem
A. Polyakov, H. Pratt (Israel) 366
Single-trial event-related potentials with wavelet denoising
R. Quian Quiroga, H. Garcia (USA, Argentina) 376
Clinical application of an EEG-based brain–computer interface: a case study in a patient with severe motor impairment
C. Neuper, G.R. Müller, A. Kübler, N. Birbaumer, G. Pfurtscheller (Austria, Germany, Italy) 399
Quantitative EEG abnormalities in recently abstinent methamphetamine dependent individuals
T.F. Newton, I.A. Cook, A.D. Kalechstein, S. Duran, F. Monroy, W. Ling, A.F. Leuchter (USA) 410
A brain–computer interface (BCI) for the locked-in: comparison of different EEG classifications for the thought translation device
T. Hinterberger, A. Kübler, J. Kaiser, N. Neumann, N. Birbaumer (Germany, Italy) 416
Characterization of epileptic seizure dynamics using Gabor atom density
C.C. Jouny, P.J. Franaszczuk, G.K. Bergey (USA) 426
Non-supervised spatio-temporal analysis of interictal magnetic spikes: comparison with intracerebral recordings
D.P. Schwartz, J.-M. Badier, J.-P. Vignal, P. Toulouse, J.-M. Scarabin, P. Chauvel (France) 438
Functional connectivity revealed by single-photon emission computed tomography (SPECT) during repetitive transcranial magnetic stimulation (rTMS) of the motor cortex
S. Okabe, R. Hanajima, T. Ohnishi, M. Nishikawa, E. Imabayashi, H. Takano, T. Kawachi, H. Matsuda, Y. Shiio, N.K. Iwata, T. Furubayashi, Y. Terao, Y. Ugawa (Japan) 450
Prolonged cortical relay time of long latency reflex and central motor conduction in patients with spinocerebellar ataxia type 6
Y.-C. Lee, J.-T. Chen, K.-K. Liao, Z.-A. Wu, B.-W. Soong (Taiwan) 458
A SEEG study of ERP in motor and premotor cortices and in the basal ganglia
I. Rektor, P. Kaňovský, M. Bareš, M. Brázdil, H. Streitová, H. Klajblová, R. Kuba, P. Daniel (Czech Republic) 463
Moving objects with clumsy fingers: how predictive is grip force control in patients with impaired manual sensibility?
D.A. Nowak, J. Hermsdörfer, C. Marquardt, H. Topka (Germany) 472
Myoelectric manifestations of sternocleidomastoid and anterior scalene muscle fatigue in chronic neck pain patients
D. Falla, A. Rainoldi, R. Merletti, G. Jull (Australia, Italy) 488
Variation in the classification of polyneuropathies among European physicians
H. Tankisi, B. Johnsen, A. Fuglsang-Frederiksen, M. de Carvalho, P.R.W. Fawcett, A. Labarre-Vila, R. Liguori, W. Nix, M. Olsen, I. Schofield (Denmark, Portugal, UK, France, Italy, Germany) 496
Event-related slow-wave activity in two subtypes of attention-deficit/hyperactivity disorder
S.J. Johnstone, R.J. Barry, A. Dimoska (Australia) 504
Face versus non-face object perception and the 'other-race' effect: a spatio-temporal event-related potential study
R. Caldara, G. Thut, P. Servoir, C.M. Michel, P. Bovet, B. Renault (Switzerland, France) 515
A transient dominance of theta event-related brain potential component characterizes stimulus processing in an auditory oddball task
J. Yordanova, O.A. Rosso, V. Kolev (Bulgaria, Argentina) 529
Exaggerated auditory startle responses in multiple system atrophy: a comparative study of parkinson and cerebellar subtypes
M. Kofler, J. Müller, K. Seppi, G.K. Wenning (Austria) 541
Effect of interstimulus interval on attentional modulation of cortical activities in human somatosensory areas
Y. Hamada, H. Okita, R. Suzuki (USA, Japan) 548
Comparison of thermal threshold tests to assess small nerve fiber function: limits vs. levels
J.P.H. Reulen, M.D.I. Lansbergen, E. Verstraete, F. Spaans (The Netherlands) 556
Somatosensory evoked potential recovery in Kii amyotrophic lateral sclerosis/parkinsonism–dementia complex (Kii ALS/PDC)
K. Machii, Y. Ugawa, Y. Kokubo, R. Sasaki, S. Kuzuhara (Japan) 564
Quality of EEG in simultaneous EEG-fMRI for epilepsy
C.-G. Bénar, Y. Aghakhani, Y. Wang, A. Izenberg, A. Al-Asmi, F. Dubeau, J. Gotman (Canada) 569
Safety of the magnetic field generated by a neuronal magnetic stimulator: evaluation of possible mutagenic effects
R. Charlet de Sauvage, F. Grattepanche, P. Cassand, R. Caubet, J.M. Moreau (France) 581
Does cortical motor neuron excitability change in peripheral nerve injury?
K. Kaneko, T. Taguchi, H. Yonemura, H. Ueno, Z. Li, S. Kawai (Japan) 596

Level of action of cathodal DC polarisation induced inhibition of the human motor cortex
M.A. Nitsche, M.S. Nitsche, C.C. Klein, F. Tergau, J.C. Rothwell, W. Paulus (Germany, UK) 600
Ipsilateral cortical activation during finger sequences of increasing complexity: representation of movement difficulty or memory load?
F. Hummel, R. Kirsammer, C. Gerloff (Germany) 605
Impairment of post-movement beta synchronisation in parkinson's disease is related to laterality of tremor
G. Tamás, I. Szirmai, L. Pálvölgyi, A. Takáts, A. Kamondi (Hungary) 614
Characteristics of physiologic tremor in young and elderly adults
R.J. Elble (USA) 624
Respiratory-related evoked potential and upper airway transmural pressure change by using the negative expiratory pressure (NEP) device
A. Grippo, R. Carrai, I. Romagnoli, F. Pinto, A. Sanna (Italy) 636
Abnormal cutaneomotor integration in patients with cerebellar syndromes: a transcranial magnetic stimulation study
S. Tamburin, A. Fiaschi, A. Andreoli, A. Forgione, P. Manganotti, G. Zanette (Italy) 643

Event-related potential indices of auditory vowel processing in 3-year-old children
R. Čeponienė, T. Lepistö, P. Alku, H. Aro, R. Näätänen (Finland, USA) 652
Electrophysiological assessment of language function following stroke
R.C.N. D'Arcy, Y. Marchand, G.A. Eskes, E.R. Harrison, S.J. Phillips, A. Major, J.F. Connolly (Canada) 662
Neural plasticity following auditory training in children with learning problems
E.A. Hayes, C.M. Warrier, T.G. Nicol, S.G. Zecker, N. Kraus (USA) 673
Maturation of human central auditory system activity: the T-complex
I. Tonnquist-Uhlen, C.W. Ponton, J.J. Eggermont, B. Kwong, M. Don (Sweden, USA, Canada) 685
Laser-evoked potentials in post-herpetic neuralgia
A. Truini, M. Haanpää, R. Zucchi, F. Galeotti, G.D. Iannetti, A. Romaniello, G. Cruccu (Italy, Finland) 702
Non-phase locked electroencephalogram (EEG) responses to CO_2 laser skin stimulations may reflect central interactions between Aδ- and C-fibre afferent volleys
A. Mouraux, J.M. Guérit, L. Plaghki (Belgium) 710
Oculomotor impairment during chronic partial sleep deprivation
M. Russo, M. Thomas, D. Thorne, H. Sing, D. Redmond, L. Rowland, D. Johnson, S. Hall, J. Krichmar, T. Balkin (USA) 723
EEG-mediated diagnosis of an unusual presentation of SSPE
A.C. Dunand, P. Jallon (Switzerland) 737
Reduced brain electric activities of frontal lobe in cortical cerebellar atrophy
M. Arai, H. Tanaka, R.D. Pascual-Marqui, K. Hirata (Japan, Switzerland) 740
Effects of auditory stimulus intensity and hearing threshold on the relationship among P300, age, and cognitive function
A.M. Fjell, K.B. Walhovd (Norway) 799
Development of the automatic mismatch response: from frontal positivity in kindergarten children to the mismatch negativity
U. Maurer, K. Bucher, S. Brem, D. Brandeis (Switzerland) 808
The electrophysiological net response ('F-complex') to spatial fusion of speech elements forming an auditory object
I. Laufer, H. Pratt (Israel) 818
Predicting EEG responses using MEG sources in superior temporal gyrus reveals source asynchrony in patients with schizophrenia
M.X. Huang, J.C. Edgar, R.J. Thoma, F.M. Hanlon, S.N. Moses, R.R. Lee, K.M. Pa[illegible]M.P. Weisend, J.G. Irwin, J.R. Bustillo, L.E. Adler, G.A. Miller, J.M. Canive (USA) 835
Enhanced activation of the auditory cortex in patients with inner-ear hearing impairment. [illegible]magnetoencephalographic study
T. Morita, Y. Naito, T. Nagamine, N. Fujiki, H. Shibasaki, J. Ito (Japan) 851
Transcranial magnetic stimulation (TMS) of the sensorimotor cortex and medial frontal cortex modifies human pain perception
M. Kanda, T. Mima, T. Oga, M. Matsuhashi, K. Toma, H. Hara, T. Satow, T. Nagamine, J.C. Rothwell, H. Shibasaki (Japan, UK) 860
Sleep architecture, slow wave activity and sleep spindles in mild sleep disordered breathing
B. Ondze, F. Espa, Y. Dauvilliers, M. Billiard, A. Besset (France) 867
Functional brain maturation in neonates as measured by EEG-sleep analyses
M.S. Scher, B.L. Jones, D.A. Steppe, D.L. Cork, H.J. Seltman, D.L. Banks (USA) 875
Artefacting reliability in QEEG topographic maps
J.S. Lawson, H. Galin, S.J. Adams, D.G. Brunet, M. Criollo, D.J. MacCrimmon (Canada) 883
Decreased habituation of the R2 component of the blink reflex in migraine patients
M. De Marinis, A. Pujia, L. Natale, E. D'arcangelo, N. Accornero (Italy) 889
Interdigital nerve conduction study of the foot for an early detection of diabetic sensory polyneuropathy
K.-S. Park, S.-H. Lee, K.-W. Lee, S.J. Oh (South Korea, USA) 894
Wavelet based automatic seizure detection in intracerebral electroencephalogram
Y.U. Khan, J. Gotman (Canada) 898
Motor imagery of phasic thumb abduction temporally and spatially modulates corticospinal excitability
C.M. Stinear, W.D. Byblow (New Zealand) 909

Grip force control during object manipulation in cerebral stroke
J. Hermsdörfer, E. Hagl, D.A. Nowak, C. Marquardt (Germany) 915
Levodopa normalizes exercise related cortico-motoneuron excitability abnormalities in Parkinson's disease
J.-S. Lou, T. Benice, G. Kearns, G. Sexton, J. Nutt (USA) 930
An automated method to determine the transcranial magnetic stimulation-induced contralateral silent period
Z.J. Daskalakis, G.F. Molnar, B.K. Christensen, A. Sailer, P.B. Fitzgerald, R. Chen (Canada, Australia) 938
Age comparison of H-reflex modulation with the Jendrássik maneuver and postural complexity
M. Tsuruike, D.M. Koceja, K. Yabe, N. Shima (Japan, USA) 945
Functional organization of exteroceptive inhibition following nociceptive electrical fingertip stimulation in humans
M. Kofler (Austria) 973
The selective gating of the N30 cortical component of the somatosensory evoked potentials of median nerve is different in the mesial and dorsolateral frontal cortex: evidence from intracerebral recordings
P. Kaňovský, M. Bareš, I. Rektor (Czech Republic) 981
Sensitivity of laserevoked potentials versus somatosensory evoked potentials in patients with multiple sclerosis
J. Spiegel, C. Hansen, U. Baumgartner, H.C. Hopf, R. Treede (Germany) 992
Motor excitability in a patient with a somatosensory cortex lesion
J. Liepert, A. Gorsler, T. van Eimeren, A. Münchau, C. Weiller (Germany) 1003
Rapid detection of threshold VEPs
A.M. Mackay, M.S. Bradnam, R. Hamilton (UK) 1009
The effects of collinearity and orientation on texture visual evoked potentials
A. Romani, R. Callieco, E. Tavazzi, V. Cosi (Italy) 1021
The assessment of daytime sleep propensity: a comparison between the Epworth Sleepiness Scale and a newly developed Resistance to Sleepiness Scale
C. Violani, F. Lucidi, E. Robusto, A. Devoto, M. Zucconi, L. Ferini Strambi (Italy) 1027
A neural complexity measure applied to MEG data in Alzheimer's disease
A.-M. van Cappellen van Walsum, Y.A.L. Pijnenburg, H.W. Berendse, B.W. van Dijk, D.L. Knol, P. Scheltens, C.J. Stam (The Netherlands) 1034
Movement-activated myoclonus in genetically defined progressive myoclonic epilepsies: EEG–EMG relationship estimated using autoregressive models
F. Panzica, L. Canafoglia, S. Franceschetti, S. Binelli, C. Ciano, E. Visani, G. Avanzini (Italy) 1041
Spatial spectra of scalp EEG and EMG from awake humans
W.J. Freeman, M.D. Holmes, B.C. Burke, S. Vanhatalo (USA) 1053
A simulation study of the error in dipole source localization for EEG spikes with a realistic head model
K. Kobayashi, H. Yoshinaga, M. Oka, Y. Ohtsuka, J. Gotman (Japan, Canada) 1069
Reference values of F wave parameters in healthy subjects
L. Puksa, E. Stålberg, B. Falck (Estonia, Sweden, Finland) 1079
The reason for forearm conduction slowing in carpal tunnel syndrome: an electrophysiological follow-up study after surgery
M.-H. Chang, S.-J. Wei, L.-W. Chen (Taiwan) 1091
Effects of transcranial magnetic stimulation on the H reflex and F wave in the hand muscles
M. Inghilleri, C. Lorenzano, A. Conte, V. Frasca, M. Manfredi, A. Berardelli (Italy) 1096
Motor-related functional subdivisions of human lateral premotor cortex: epicortical recording in conditional visuomotor task
R. Matsumoto, A. Ikeda, S. Ohara, M. Matsuhashi, K. Baba, F. Yamane, T. Hori, T. Mihara, T. Nagamine, H. Shibasaki (Japan) 1102
Time course of arousal response during periodic leg movements in patients with periodic leg movements and restless legs syndrome
E. Sforza, C. Jouny, V. Ibanez (Switzerland) 1116
Neurocognitive effects of repetitive transcranial magnetic stimulation in severe major depression
B. Martis, D. Alam, S.M. Dowd, S.K. Hill, R.P. Sharma, C. Rosen, N. Pliskin, E. Martin, V. Carson, P.G. Janicak (USA) 1125
Measuring duration mismatch negativity
T. Jacobsen, E. Schröger (Germany) 1133
Event-related brain potentials in memory: correlates of episodic, semantic and implicit memory
S. Wieser, H.G. Wieser (Switzerland) 1144
Changes in oscillatory cortical activity related to a visuomotor task in young and elderly healthy subjects
E. Labyt, W. Szurhaj, J.-L. Bourriez, F. Cassim, L. Defebvre, A. Destée, J.-D. Guieu, P. Derambure (France) 1153
Nonlinear EEG analysis during sleep in premature and full-term newborns
R. Ferri, R. Chiaramonti, M. Elia, S.A. Musumeci, A. Ragazzoni, C.J. Stam (Italy, Netherlands) 1176
High-resolution time course of hemispheric dominance revealed by low-resolution electromagnetic tomography
A. Sinai, H. Pratt (Israel) 1181
The effect of quadriceps-electrocutaneous stimulation on the T-reflex and the H-reflex of the soleus muscle
E.J. Kim, T.-S. Yoon (South Korea) 1189
Brain symmetry and topographic analysis of lateralized event-related potentials
R. Oostenveld, D.F. Stegeman, P. Praamstra, A. van Oosterom (Netherlands) 1194

What aspect of the fMRI BOLD signal best reflects the underlying electrophysiology in human somatosensory cortex
O. Arthurs, S. Boniface (UK) 1203
Quantitative EEG and dynamic susceptibility contrast MRI in Alzheimer's disease: a correlative study
D. Mattia, F. Babiloni, A. Romigi, F. Cincotti, L. Bianchi, F. Sperli, F. Placidi, A. Bozzao, P. Giacomini, R. Floris, M. Grazia Marciani (Italy) 1210
Post-stroke reorganization of hand motor area: a 1-year prospective follow-up with focal transcranial magnetic stimulation
V. Delvaux, G. Alagona, P. Gérard, V. De Pasqua, G. Pennisi, A.M. de Noordhout (Belgium) 1217
Spatiotemporal patterns of beta desynchronization and gamma synchronization in corticographic data during self-paced movement
G. Pfurtscheller, B. Graimann (Austria), J. Huggins, S. Levineand L. Schuh (USA) 1226
Detection of subclinical brain electrical activity changes in Huntington's disease using artificial neural networks
M. de Tommaso, F. De Carlo, O. Difruscolo, R. Massafra, V. Sciruicchio, R. Bellotti (Italy) 1237
Neurophysiological study of facial chorea in patients with Huntington's disease
E. Muñoz, A. Cervera, J. Valls-Solé (Spain) 1246
Recovery cycle of the masseter inhibitory reflex after magnetic stimulation in normal subjects
E. Gastaldo, A. Graziani, M. Paiardi, R. Quatrale, R. Eleopra, V. Tugnoli, E. Granieri (Italy) 1253
Distinct cortical areas for motor preparation and execution in human identified by Bereitschaftspotential recording and ECoG-EMG coherence analysis
T. Satow, M. Matsuhashi, A. Ikeda, J. Yamamoto, M. Takayama, T. Begum, T. Mima, T. Nagamine, N. Mikuni, S. Miyamoto N. Hashimoto, H. Shibasaki (Japan) 1259
Frequency-dependent, bi-directional plasticity in motor cortex of human adults
J.B. Pitcher, M.C. Ridding, T.S. Miles (Australia) 1265
Slow frequency repetitive transcranial magnetic stimulation affects reaction times, but not priming effects, in a masked prime task
F. Schlaghecken, A. Münchau, B. Bloem, J. Rothwell, M. Eimer (UK) 1272
Exaggerated 16–20 Hz motor cortical oscillation in patients with positive or negative myoclonus
Y. Ugawa, R. Hanajima, Y. Terao, I. Kanazawa (Japan) 1278
Recognition memory for unfamiliar faces does not differ for adult normal and dyslexic readers: an event-related brain potential study
J. Rüsseler, S. Johannes, T.F. Münte (Germany) 1285
Identical event-related potentials to target and frequent stimuli of visual oddball task recorded by intracerebral electrodes
M. Kukleta, M. Brázdil, R. Roman, P. Jurák (Czech Republic) 1292
The spatial distribution of attentional selectivity in touch: evidence from somatosensory ERP components
M. Eimer, B. Forster (UK) 1298
Assessing auditory nerve recovery function with a modified subtraction method: results and mathematical modeling
B. Charasse, H. Thai-Van, C. Berger-Vachon, L. Collet (France) 1307
Evoked potentials to auditory movement sensation in duplex perception
I. Laufer, H. Pratt (Israel) 1316
Effects of age and age-related hearing loss on the neural representation of speech cues
K.L. Tremblay, M. Piskosz, P. Souza (USA) 1332
Vestibular evoked myogenic potentials in patients suffering from an unilateral acoustic neuroma: a study of 170 patients
T. Patko, P.-P. Vidal, N. Vibert, P. Tran Ba Huy, C. de Waele (France) 1344
Early somatosensory processing during tonic muscle pain in humans: relation to loss of proprioception and motor 'defensive' strategies
S. Rossi, R. della Volpe, F. Ginanneschi, M. Ulivelli, S. Bartalini, R. Spidalieri, A. Rossi (Italy) 1351
Adaptation characteristics of steady-state motion visual evoked potentials
S.P. Heinrich, M. Bach (Germany) 1359
Establishment of standard values for the latency, interval and amplitude parameters of tibial nerve somatosensory evoked potentials (SEPs)
T. Miura, M. Sonoo, T. Shimizu (Japan) 1367
Thirty minutes mobile phone use has no short-term adverse effects on central auditory pathways
N. Arai, H. Enomoto, S. Okabe, K. Yuasa, Y. Kamimura, Y. Ugawa (Japan) 1390
The long-term effects of antiepileptic drugs on the visual system in rats: electrophysiological and histopathological studies
Y. Goto, T. Taniwaki, J. Shigematsu, S. Tobimatsu (Japan) 1395
Intracranial volume conduction of cortical spikes and sleep potentials recorded with deep brain stimulating electrodes
R.A. Wennberg A.M. Lozano (Canada) 1403
Early diagnosis of diabetic neuropathy using double-shock stimulation of peripheral nerves
M. Tan, U. Tan (Turkey) 1419
Influence of stimulus intensity on waveform of sympathetic skin response evoked by magnetic stimulation
M. Toyokura (Japan) 1423
Relationships between the changes in compound muscle action potentials and selective injuries to the spinal cord and spinal nerve roots
S. Tsutsui, T. Tamaki, H. Yamada, H. Iwasaki, M. Takami (Japan) 1431

Changes in motor cortical excitability induced by paired associative stimulation
M. Ridding, J. Uy (Australia) 1437
Finger interactions studied with transcranial magnetic stimulation during multi-finger force production tasks
F. Danion, M.L. Latash, S. Li (France, USA) 1445
EMG responses evoked by the termination of galvanic (DC) vestibular stimulation: 'off-responses'
S. Watson, M. Welgampola J. Colebatch (Australia) 1456
Dynamic synchronisation of central oscillators in essential tremor
B. Hellwig, B. Schelter, B. Guschlbauer, J. Timmer, C. Lücking (Germany) 1462
Control of hand movements after striatocapsular stroke: high-resolution temporal analysis of the function of ipsilateral activation
R. Verleger, S. Adam, M. Rose, C. Vollmer, B. Wauschkuhn, D. Kömpf (Germany) 1468
Changes in median nerve somatosensory transmission and motor output following transient deafferentation of the radial nerve in humans
B. Murphy, H.H. Taylor, S. Wilson, J. Knight, K. Mathers, S. Schug (New Zealand, Western Australia) 1477
Intracerebral somatosensory event-related potentials: effect of response type (button pressing versus mental counting) on P3-like potentials within the human brain
M. Brázdil, R. Roman, P. Daniel, I. Rektor (Czech Republic) 1489
The disruptive effect of chronic pain on mismatch negativity
B. Dick, J. Connolly, P. McGrath, G. Finley, G. Stroink, M. Houlihan, A. Clark (Canada) 1497
Event-related potentials associated with second language learning in children
A. Shestakova, M. Huotilainen, R. Čeponienė, M. Cheour (USA) 1507
Differential characteristics of the middle latency auditory evoked magnetic responses to interstimulus intervals
T. Onitsuka, H. Ninomiya, E. Sato, T. Yamamoto, N. Tashiro (Japan) 1513
Repetitive transcranial magnetic stimulation of the parietal cortex transiently ameliorates phantom limb pain-like syndrome
R. Töpper, H. Foltys, I.G. Meister, R. Sparing, B. Boroojerdi (Germany) 1521
Rapid reversible changes to multiple levels of the human somatosensory system following the cessation of repetitive contractions: a somatosensory evoked potential study
B. Murphy, H.H. Taylor, S. Wilson, G. Oliphant, K. Mathers (New Zealand) 1531
Influence of cholinergic circuitries in generation of high-frequency somatosensory evoked potentials
D. Restuccia, G.D. Marca, M. Valeriani, M. Rubino, N. Paciello, C. Vollono, A. Capuano, P. Tonali (Italy) 1538
Spectral composition of NREM sleep in healthy subjects with moderately increased daytime sleepiness
A. Wichniak, P. Geisler, H. Brunner, F. Tracik, T. Crönlein, E. Friess, J. Zulley (Germany) 1549
EMG contamination of EEG: spectral and topographical characteristics
I.I. Goncharova, D.J. McFarland, T.M. Vaughan, J.R. Wolpaw (USA) 1580
Spatial correlation of the infant and adult electroencephalogram
P.G. Grieve, R.G. Emerson, W.P. Fifer, J.R. Isler, R.I. Stark (USA) 1594
Autonomic and respiratory dysfunction in Charcot–Marie–Tooth disease due to Thr124Met mutation in the myelin protein zero gene
T. Stojkovic, J. de Seze, O. Dubourg, M.C. Arne-Bes, S. Tardieu, J. Hache, P. Vermersch (France) 1609
The prognostic value of evoked responses from primary somatosensory and auditory cortex in comatose patients
F. Logi, C. Fischer, L. Murri, F. Mauguière (Italy, France) 1615
Low-frequency rTMS over lateral premotor cortex induces lasting changes in regional activation and functional coupling of cortical motor areas
W.-H. Chen, T. Mima, H.R. Siebner, T. Oga, H. Hara, T. Satow, T. Begum, T. Nagamine, H. Shibasaki (Japan) 1628
Neurophysiological study of corticomotor pathways in restless legs syndrome
R. Quatrale, M. Manconi, E. Gastaldo, R. Eleopra, V. Tugnoli, M. Tola, E. Granieri (Italy) 1638
The effects of stroke and age on finger interaction in multi-finger force production tasks
S. Li, M.L. Latash, G.H. Yue, V. Siemionow, V. Sahgal (USA) 1646
Effects of TMJ anesthesia and jaw gape on jaw-stretch reflexes in humans
F. Lobbezoo, K. Wang, I. Aartman, P. Svensson (The Netherlands, Denmark) 1656
Cortical correlates of neuromotor development in healthy children
M. Garvey, U. Ziemann, J. Bartko, M. Denckla, C. Barker, E. Wassermann (Germany, USA) 1662
The mismatch negativity and the P3a components of the auditory event-related potentials in autistic low-functioning subjects
R. Ferri, M. Elia, N. Agarwal, B. Lanuzza, S.A. Musumeci, G. Pennisi (Italy) 1671
Dynamic movement of N100m dipoles in evoked magnetic field reflects sequential activation of isofrequency bands in human auditory cortex
I. Ozaki, Y. Suzuki, C.Y. Jin, M. Baba, M. Matsunaga, I. Hashimoto (Japan) 1681
Hand posture modulates neuronal interaction in the primary somatosensory cortex of humans
Y. Hamada, R. Suzuki (Japan) 1689
Trigemino-cervical-spinal reflexes in humans
M. Serrao, P. Rossi, L. Parisi, A. Perrotta, M. Bartolo, P. Cardinali, G. Amabile, F. Pierelli (Italy) 1697

Electrical-induced pain diminishes somatosensory evoked magnetic cortical fields
T. Tran, M. Hoshiyama, K. Inui, R. Kakigi (Japan) 1704
CAP variables and arousals as sleep electroencephalogram markers for primary insomnia
M.G. Terzano, L. Parrino, M.C. Spaggiari, V. Palomba, M. Rossi, A. Smerieri (Italy) 1715
Lateralized and focal clinical, EEG, and FLAIR MRI abnormalities in Creutzfeldt–Jakob disease
D.M. Cambier, K. Kantarci, G.A. Worrell, B.F. Westmoreland, A.J. Aksamit (USA) 1724
Effects of stimulant medications on children with attention-deficit/hyperactivity disorder and excessive beta activity in their EEG
A.R. Clarke, R.J. Barry, R. McCarthy, M. Selikowitz, D.C. Clarke, R.J. Croft (Australia) 1729
Electroencephalographic findings in Kufs disease
L. Vadlamudi, B.F. Westmoreland, D.W. Klass, J.E. Parisi (USA) 1738
Scalp-recorded slow EEG responses generated in response to hemodynamic changes in the human brain
S. Vanhatalo, P. Tallgren, C. Becker, M. Holmes, J. Miller, K. Kaila, J. Voipio (USA, Finland) 1744
European data format 'plus' (EDF) +, an EDF alike standard format for the exchange of physiological data
B. Kemp, J. Olivan (Spain) 1755
Investigation of the normal proximal somatomotor system using magnetoencephalography
J.M. Stephen, L.E. Davis, C.J. Aine, D. Ranken, M. Herman, D. Hudson, M. Huang, J. Poole (USA) 1781
Usefulness of neurophysiologic techniques in stereotactic subthalamic nucleus stimulation for advanced Parkinson's disease
J. Molinuevo, F. Valldeoriola, J. Valls-Solé (Spain) 1793
Interhemispheric effects of high and low frequency rTMS in healthy humans
A. Gorsler, T. Bäumer, C. Weiller, A. Münchau, J. Liepert (Germany) 1800
Long-latency motor evoked potentials in congenital hemiplegia
Y. Vandermeeren, E. Bastings, L. Fadiga, E. Olivier (USA, Italy, Belgium) 1808
Event-related desynchronization and excitability of the ipsilateral motor cortex during simple self-paced finger movements
C. Rau, C. Plewnia, F. Hummel, C. Gerloff (Germany) 1819
Suprathreshold 0.3 Hz repetitive TMS prolongs the cortical silent period: potential implications for therapeutic trials in epilepsy
M. Cincotta, A. Borgheresi, C. Gambetti, F. Balestrieri, L. Rossi, G. Zaccara, M. Ulivelli, S. Rossi, C. Civardi, R. Cantello (Italy) 1827
The α2-adrenergic agonist guanfacine reduces excitability of human motor cortex through disfacilitation and increase of inhibition
A. Korchounov, T.V. Ilić, U. Ziemann (Germany) 1834
Event related potentials during attention tasks in VLBW children with and without attention deficit disorder
S. Potgieter, J. Vervisch, L. Lagae (Belgium) 1841
An ERP study of the global precedence effect: the role of spatial frequency
S. Han, E.W. Yund, D.L. Woods (PR China, USA) 1850
Effect of tactile interference stimulation of the ear in human primary somatosensory cortex: a magnetoencephalographic study
T. Nihashi, R. Kakigi, M. Hoshiyama, K. Miki, Y. Kajita, J. Yoshida, H. Yatsuya (Japan) 1866
Short-term plastic changes of the human nociceptive system following acute pain induced by capsaicin
M. Valeriani, L. Arendt-Nielsen, D. Le Pera, D. Restuccia, T. Rosso, L. De Armas, T. Maiese, A. Fiaschi, P. Tonali, M. Tinazzi (Denmark, Italy) 1879
Motor evoked potentials from the striated urethral sphincter and puborectal muscle: reproducibility of latencies
S. Brostrom, P. Jennum, G. Lose (Denmark) 1891
The effects of self-awakening on heart rate activity in a short afternoon nap
K. Kaida, E. Nakano, H. Nittono, M. Hayashi, T. Hori (Japan) 1896
Effects of scopolamine on MEG spectral power and coherence in elderly subjects
D. Osipova, J. Ahveninen, S. Kaakkola, I.P. Jääskeläinen, J. Huttunen, E. Pekkonen (Finland) 1902
Electroencephalography in holoprosencephaly: findings in children without epilepsy
J.S. Hahn, M.R. Delgado, N.J. Clegg, S.P. Sparagana, K.L. Gerace, A.J. Barkovich, D.M. Olson (USA) 1908
EEG development in children with sociocultural disadvantages: a follow-up study
G. Otero, F. Pliego-Rivero, T. Fernández, J. Ricardo (Mexico) 1918
EEG activity of aviators during imagery flight training
O. Tokumaru, C. Mizumoto, Y. Takada, H. Ashida (Japan) 1926
Desynchronization of cortical rhythms following cutaneous stimulation: effects of stimulus repetition and intensity, and of the size of corpus callosum
A. Stancák, J. Svoboda, R. Rachmanová, J. Vrána, J. Králík, J. Tintera (Czech Republic) 1936
Spike cluster analysis in neocortical localization related epilepsy yields clinically significant equivalent source localization results in magnetoencephalogram (MEG)
D. Van 't Ent, I. Manshanden, P. Ossenblok, D. Velis, J. de Munck, J. Verbunt, F. Lopes da Silva (The Netherlands) 1948
High-resolution EEG: Cortical potential imaging of interictal spikes
X. Zhang, W. van Drongelen, K. Hecox, V. Towle, D. Frim, A. McGee, B. He (USA) 1963
Aliasing in the visual EEG: a potential pitfall of video display technology
C.M. Epstein (USA) 1974
The 3D topography of MEG source localization accuracy: effects of conductor model and noise
A. Tarkiainen, M. Liljeström, M. Seppä, R. Salmelin (Finland) 1977

Clinical aspects and pathophysiology of narcolepsy
Y. Dauvilliers, M. Billiard, J. Montplaisir (France, Canada) 2000
The effects of alteration of effector and side of movement on the contingent negative variation
G. Dirnberger, K. Greiner, C. Duregger, W. Endl, G. Lindinger, W. Lang (Austria) 2018
Increased rate of P300 latency prolongation with age in drug-naive and first episode schizophrenia
J. Wang, Y. Hirayasu, K.-I. Hiramatsu, H. Hokama, H. Miyazato, C. Ogura (Japan) 2029
Disturbed transcallosally mediated motor inhibition in children with attention deficit hyperactivity disorder (ADHD)
J. Buchmann, A. Wolters, F. Haessler, S. Bohne, R. Nordbeck, E. Kunesch (Germany) 2036
Chronic schizophrenics with positive symptomatology have shortened EEG microstate durations
V. Strelets, P. Faber, J. Golikova, V. Novototsky-Vlasov, T. Koenig, L. Gianotti, J. Gruzelier, D. Lehmann
(Russia, UK, Switzerland) 2043
Source distribution of neuromagnetic slow wave activity in schizophrenic and depressive patients
C. Wienbruch, S. Moratti, T. Elbert, U. Vogel, T. Fehr, J. Kissler, A. Schiller, B. Rockstroh (Germany) 2052
Association between reduced duration mismatch negativity (MMN) and raised temporal discrimination thresholds in schizophrenia
J. Todd, P. Michie, A. Jablensky (Australia) 2061
Effects of single-pulse transcranial magnetic stimulation (TMS) on functional brain activity: a combined event-related TMS and evoked potential study
G. Thut, G. Northoff, J. Ives, Y. Kamitani, A. Pfennig, F. Kampmann, D. Schomer, A. Pascual-Leone (USA) 2071
Abnormal CNV in chronic heavy drinkers
L.L. Chao, D.J. Meyerhoff, V.A. Cardenas, J.C. Rothlind, M.W. Weiner (USA) 2081
A whole head MEG study of the amplitude-modulation-following response: phase coherence, group delay and dipole source analysis
R. Schoonhoven, C. Boden, J. Verbunt, J. de Munck (The Netherlands) 2096
Muscle afferent inputs from the hand activate human cerebellum sequentially through parallel and climbing fiber systems
I. Hashimoto, T. Kimura, M. Tanosaki, Y. Iguchi, K. Sekihara (Japan) 2107
Tactile interference to the face affects magnetic responses elicited by electric thumb stimulation
M. Tanosaki, Y. Iguchi, Y. Hoshi, I. Hashimoto (Japan) 2118
The effects of different levels of all-rac- and RRR-α-tocopheryl acetate (vitamin E) on visual function in rats
S. Hayton, A. Kriss, A. Wade, D. Muller (UK) 2124
Vector analysis of visual evoked potentials in migraineurs with visual aura
P. Coutin-Churchman, A.P. de Freytez (Venezuela) 2132
First night effect in children and adolescents undergoing polysomnography for sleep-disordered breathing
S. Scholle, H.-C. Scholle, A. Kemper, S. Glaser, B. Rieger, G. Kemper, G. Zwacka (Germany) 2138
A study of the dynamic interactions between sleep EEG and heart rate variability in healthy young men
F. Jurysta, P. van de Borne, P.-F. Migeotte, M. Dumont, J.-P. Lanquart, J.-P. Degaute, P. Linkowski (Belgium) 2146
Seizure detection: correlation of human experts
S.B. Wilson, M.L. Scheuer, C. Plummer, B. Young, S. Pacia (USA) 2156
Callosal role in generation of epileptiform discharges: quantitative analysis of EEGs recorded in patients undergoing corpus callosotomy
A. Matsuo, T. Ono, H. Baba, K. Ono (Japan) 2165
Sudomotor nerve conduction velocity and central processing time of the skin conductance response
C. Lim, M. Seto-Poon, P. Clouston, J. Morris (Australia) 2172
Impairment of transcallosal inhibition in patients with corticobasal degeneration
C. Trompetto, A. Buccolieri, R. Marchese, L. Marinelli, G. Michelozzi, G. Abbruzzese (Italy) 2181
Age and gender effects on heart rate activation associated with periodic leg movements in patients with restless legs syndrome
N. Gosselin, P. Lanfranchi, M. Michaud, L. Fantini, J. Carrier, G. Lavigne, J. Montplaisir (Canada) 2188
Central motor conduction differs between acute relapsing–remitting and chronic progressive multiple sclerosis
A. Humm, M. Magistris, A. Truffert, C. Hess, K. Rösler (Switzerland) 2196
Modeling the effects of electrical conductivity of the head on the induced electric field in the brain during magnetic stimulation
K. Davey, C.M. Epstein, M.S. George, D.E. Bohning (USA) 2204
A TMS coil positioning/holding system for MR image-guided TMS interleaved with fMRI
D.E. Bohning, S. Denslow, P. Bohning, J. Walker, M. George (USA) 2210
Neural activity associated with binaural processes for the perceptual segregation of pitch
B.W. Johnson, M. Hautus, W.C. Clapp (New Zealand) 2245
Changes in somatosensory evoked responses by repetition of the median nerve stimulation
M. Hoshiyama, R. Kakigi (Japan) 2251
Human sleep spindle characteristics after sleep deprivation
V. Knoblauch, W.L. Martens, A. Wirz-Justice, C. Cajochen (The Netherlands, Switzerland) 2258
The alerting effects of caffeine, bright light and face washing after a short daytime nap
M. Hayashi, A. Masuda, T. Hori (Japan) 2268
Effect of total sleep deprivation on the landmarks of stage 2 sleep
G. Curcio, M. Ferrara, M.C. Pellicciari, R. Cristiani, L. De Gennaro (Italy) 2279

Clinical-electroencephalogram patterns at seizure onset in patients with hippocampal sclerosis
B. Giagante, S. Oddo, W. Silva, D. Consalvo, E. Centurion, L. D'Alessio, P. Solis, P. Salgado, E. Seoane, P. Saidon, S. Kochen (Argentina) 2286
Quantitative spectral analysis of EEG in psychiatry revisited: drawing signs out of numbers in a clinical setting
P. Coutin-Churchman, Y. Añez, M. Uzcátegui, L. Alvarez, F. Vergara, L. Mendez, R. Fleitas (Venezuela) 2294
Optimizing PCA methodology for ERP component identification and measurement: theoretical rationale and empirical evaluation
J. Kayser, C.E. Tenke (USA) 2307
Abnormal warm and cold sensation thresholds suggestive of small-fibre neuropathy in sarcoidosis
E. Hoitsma, M. Drent, E. Verstraete, C. Faber, J. Troost, F. Spaans, J. Reulen (Netherlands) 2326
Marinacci communication: an electrophysiological study
S. Meenakshi-Sundaram, B. Sundar, M. Arunkumar (India) 2334
Selective spatial information from surface EMG after temporal filtering: the application to interference EMG using cross-covariance analysis
R. Grassme, D. Stegeman, G. Drost, N. Schumann, H. Scholle (The Netherlands, Germany) 2338
A rare form of painful nondystrophic myotonia
T. Torbergsen, A. Hødnebø, N. Brautaset, S. Løseth, E. Stålberg (Norway, Sweden) 2347
Reliability of electromyographic and torque measures during isometric axial rotation exertions of the trunk
J.K.-F. Ng, M. Parnianpour, V. Kippers, C.A. Richardson (Iran, Australia) 2355
The variability of intracortical inhibition and facilitation
M. Orth, A. Snijders, J. Rothwell (UK) 2362
Facilitation of motor evoked potentials in ischemic stroke patients: prognostic value and neurophysiologic correlations
B. Dachy, E. Biltiau, E. Bouillot, B. Dan, P. Deltenre (Belgium) 2370
The influence of time preparation on motor processes assessed by surface Laplacian estimation
C. Tandonnet, B. Burle, F. Vidal and T. Hasbroucq (France) 2376
EMG remains fractionated in Parkinson's disease, despite practice-related improvements in performance
D. Flament, D. Vaillancourt, T. Kempf, K. Shannon, D. Corcos (USA) 2385
Decreased cortical excitability during motor imagery after disuse of an upper limb in humans
F. Kaneko, T. Murakami, K. Onari, H. Kurumadani, K. Kawaguchi (Japan) 2397
Motor representation in patients rapidly recovering after stroke: a functional magnetic resonance imaging and transcranial magnetic stimulation study
H. Foltys, T. Krings, I.G. Meister, R. Sparing, B. Boroojerdi, A. Thron, R. Töpper (Germany) 2404
Depressed intracortical inhibition after long trains of subthreshold repetitive magnetic stimuli at low frequency
N. Modugno, A. Currà, A. Conte, M. Inghilleri, L. Fofi, R. Agostino, M. Manfredi, A. Berardelli (Italy) 2416
Motor preparation is more impaired in Parkinson's disease when sensorimotor integration is involved
E. Labyt, D. Devos, J.-L. Bourriez, F. Cassim, A. Destée, J.-D. Guieu, L. Defebvre P. Derambure (France) 2423
Plasticity of the human motor system following muscle reconstruction: a magnetic stimulation and functional magnetic resonance imaging study
R. Chen, D.J. Anastakis, C.T. Haywood, D.J. Mikulis, R.T. Manktelow (Canada) 2434
Cortical and subcortical distribution of middle and long latency auditory and visual evoked potentials in a cognitive (CNV) paradigm
M. Bareš, I. Rektor, P. Kaňovský, H. Streitová (Czech Republic) 2447
Event-related potential N270, a negative component to identification of conflicting information following memory retrieval
X. Zhang, Y. Wang, S. Li, L. Wang (People's Republic of China) 2461
N400 during lexical decision tasks: a current source localization study
J. Silva-Pereyra, M. Rivera-Gaxiola, E. Aubert, J. Bosch, L. Galán, A. Salazar (USA, Cuba, Mexico) 2469
Development of a multi-channel exploratory battery for psychophysiological assessment: the Stress Profile
M.I. Diaz, M.A. Vallejo, M.I. Comeche (Spain) 2487

Book Reviews
Matter of mind – K.M. Heilman (Ed.)
J.M. Castellote, J. Valls-Solé (Spain) 391
Cells, Gels and the Engines of Life — G.H. Pollack (Ed.)
X. Gasull (Spain) 748
Sleep and Epilepsy: the Clinical Spectrum — C.W. Bazil, B.A. Malow and M.R. Sammaritano (Eds.)
J. Santamaria (Spain) 749
Vision in the Brain — P.G. Simos (Ed.)
P. Bartolomeo (France) 750
Clinical Neurophysiology, 2nd Edition — J.R. Daube (Ed.)
J. Valls-Solé (Spain) 1762
Panayiotopoulos Syndrome: A Common and Benign Childhood Epileptic Syndrome — C.P. Panayiotopoulos
K.R. Kelley, D.R. Nordli (USA) 1993

Psychiatry as a Neuroscience — Juan José López-Ibor, Wolfgang Gaebel, Mario Maj, Norman Sartorius (Eds.)
J. Blanch (Spain) 1994

Letters to the Editor
Safety criteria for transcranial direct current stimulation (tDCS) in humans
M.A. Nitsche, D. Liebetanz, N. Lang, A. Antal, F. Tergau, W. Paulus (Germany) 2220
Reply to Dr. Paulus
A. Priori (Italy) 2222
Failure of Digitimer's D-185 transcranial stimulator to deliver declared stimulus parameters
H. Journée, J. Shils, A. Bueno de Camargo, K. Novak, V. Deletis (The Netherlands, USA) 2497

Society Proceedings
III Latin-American Chapter Congress of IFCN and IX Brazilian Symposium of Clinical Neurophysiology, Porto Seguro, Bahia, Brazil, 11–14 September 2002 154

Annual Meeting of the Western Clinical Neurophysiology Society, Portland, OR, 21–22 February 2002 393

American Association of Electrodiagnostic Medicine Meeting, Toronto, Canada, 9–13 October 2002 751

32nd Annual Meeting of Japanese Society of Clinical Neurophysiology, Fukushima, 13–15 November 2002 1763

Corrigendum 954

Corrigendum 395

Acknowledgement to reviewers 166

Index of Authors to Volume 114 2499

Index of Subjects to Volume 114 2516

Table of Contents to Volume 114 2549